# 19/546,003

FILE 'HOME' ENTERED AT 15:57:07 ON 29 SEP 2006

=> set abbr on pmer

'ON PMER' IS NOT VALID HERE

For an explanation of the SET command, enter "HELP SET" at an arrow prompt (=>).

=> set abbr on perm
SET COMMAND COMPLETED

=> set plurals on perm
SET COMMAND COMPLETED

=> file uspatfull caplus japio COST IN U.S. DOLLARS

FULL ESTIMATED COST

SINCE FILE TOTAL ENTRY SESSION 0.21 0.21

FILE 'USPATFULL' ENTERED AT 15:57:46 ON 29 SEP 2006
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FILE 'CAPLUS' ENTERED AT 15:57:46 ON 29 SEP 2006
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COPYRIGHT (C) 2006 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'JAPIO' ENTERED AT 15:57:46 ON 29 SEP 2006 COPYRIGHT (C) 2006 Japanese Patent Office (JPO) - JAPIO

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=> e grubbs robert/in
E1
             3
                   GRUBBS MICHAEL/IN
                   GRUBBS MICHAEL R/IN
E2
             9
             5 --> GRUBBS ROBERT/IN
E3
                   GRUBBS ROBERT A/IN
E4
             2
                   GRUBBS ROBERT B/IN
E5
             1
                   GRUBBS ROBERT E/IN
E6
             2
                   GRUBBS ROBERT EUGENE/IN
E7
             4
                   GRUBBS ROBERT H/IN
E8
           188
                   GRUBBS ROBERT HOWARD/IN
E9
            20
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E10
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E11
             6
                   GRUBBS ROY E/IN
E12
             1
=> s e8
           188 "GRUBBS ROBERT H"/IN
L1
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=> s (metathesis or ring(1w)open?)(s)hydrogenat?

L2 3473 (METATHESIS OR RING(1W) OPEN?)(S) HYDROGENAT?

=> s l1 and l2

L3 9 L1 AND L2

=> d 13 1-9 ibib abs

L3 ANSWER 1 OF 9 USPATFULL on STN

ACCESSION NUMBER:

2003:335499 USPATFULL

TITLE:

Synthesis of A,B-alternating copolymers by olefin metathesis reactions of cyclic olefins or olefinic

polymers with an acyclic diene

INVENTOR(S):

Choi, Tae-Lim, Pasadena, CA, UNITED STATES
Lee, Choon Woo, Pasadena, CA, UNITED STATES
Rutenberg, Isaac M., Pasadena, CA, UNITED STATES
Grubbs, Robert H., South Pasadena, CA, UNITED

#### STATES

NUMBER KIND DATE -----US 2003236377 A1 20031225 US 6987154 B2 20060117 US 2003-371195 A1 20030219 (10) PATENT INFORMATION: APPLICATION INFO.:

> NUMBER DATE -----

PRIORITY INFORMATION: US 2002-359055P 20020219 (60)

DOCUMENT TYPE: Utility

APPLICATION FILE SEGMENT:

LEGAL REPRESENTATIVE: REED & EBERLE LLP, 800 MENLO AVENUE, SUITE 210, MENLO

PARK, CA, 94025

NUMBER OF CLAIMS: 46 EXEMPLARY CLAIM:

NUMBER OF DRAWINGS: 1 Drawing Page(s)

2245 LINE COUNT:

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AR This invention relates generally to synthetic procedures that include the step of ring-opening metathesis of cyclic olefins and reaction with an acyclic diene co-reactant to produce regularly repeating A,B-alternating olefin polymers. The A,B-alternating polymers are produced by varying reaction conditions and/or reactant proportions and using only two types of olefin metathesis (ring-opening and cross) to provide regularly repeating ABAB . . . etc. polymers via ring-opening metathesis polymerization (ROMP). More particularly, the invention pertains to synthesis of A,B-alternating olefin polymers via olefin metathesis reactions using a Group 8 transition metal complex as the metathesis catalyst. Polymers provided herein have utility in a variety of fields, including not only polymer chemistry per se, but also in the pharmaceutical, biomedical, and packaging industries where the structure and properties of polymers need to be tightly controlled.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ANSWER 2 OF 9 USPATFULL on STN

2003:335489 USPATFULL ACCESSION NUMBER:

Ring-expansion of cyclic olefins by olefin metathesis TITLE:

reactions with an acyclic diene

INVENTOR(S): Choi, Tae-Lim, Pasadena, CA, UNITED STATES

Lee, Choon Woo, La Canada, CA, UNITED STATES Kim, Hyunjin M., San Ramon, CA, UNITED STATES Grubbs, Robert H., South Pasadena, CA, UNITED

STATES

NUMBER KIND DATE -----US 2003236367 A1 20031225 US 7034096 B2 20060425 US 2003-371196 A1 20030219 (10) PATENT INFORMATION: APPLICATION INFO.:

> DATE NUMBER

\_\_\_\_\_\_

US 2002-359055P 20020219 (60) PRIORITY INFORMATION:

DOCUMENT TYPE: Utility APPLICATION FILE SEGMENT:

LEGAL REPRESENTATIVE: REED & EBERLE LLP, 800 MENLO AVENUE, SUITE 210, MENLO

PARK, CA, 94025

NUMBER OF CLAIMS: 47 EXEMPLARY CLAIM: 1 LINE COUNT: 2063

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AΒ This invention relates generally synthetic procedures that include the step of ring-opening metathesis of cyclic olefins and reaction with an acyclic diene co-reactant to produce olefin macrocycles by ring expansion, or alternatively. The ring expansion of the cyclic olefin is provided by three types of sequential olefin metathesis (ring-opening, cross, and ring-closing olefin metathesis). More particularly, the invention pertains to synthesis of olefin macrocycles via olefin metathesis reactions using a Group 8 transition metal complex as the metathesis catalyst. Macrocycles provided herein have a variety of uses in the pharmaceutical, biomedical, organic synthesis and chemical industries, such as the production of crown ethers that are useful as metal complexing species.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ANSWER 3 OF 9 USPATFULL on STN

ACCESSION NUMBER: 2002:160830 USPATFULL

TITLE: Methods for cross-methathesis of terminal olefins

INVENTOR(S): Grubbs, Robert H., South Pasadena, CA, United

States

O'Leary, Daniel J., Claremont, CA, United States Blackwell, Helen E., Somerville, MA, United States California Institute of Technology, Pasadena, CA,

PATENT ASSIGNEE(S): United States (U.S. corporation)

> NUMBER KIND DATE ------

US 6414097 B1 20020702 US 2001-919658 20010731 (9) PATENT INFORMATION: APPLICATION INFO.:

RELATED APPLN. INFO.: Division of Ser. No. US 2000-491800, filed on 26 Jan

2000, now patented, Pat. No. US 6306988

DATE NUMBER

PRIORITY INFORMATION: US 1999-117270P 19990126 (60)

DOCUMENT TYPE: Utility GRANTED FILE SEGMENT: PRIMARY EXAMINER: Wu, David W. ASSISTANT EXAMINER: Harlan, R.

LEGAL REPRESENTATIVE: Pillsbury Winthrop LLP

NUMBER OF CLAIMS: 21 EXEMPLARY CLAIM:

NUMBER OF DRAWINGS: 0 Drawing Figure(s); 0 Drawing Page(s)

LINE COUNT: 396

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

A method for the cross-metathesis of terminal olefins is disclosed. The method describes making disubstituted internal olefin products by contacting a first terminal olefin with another first terminal olefin to form a dimer and then contacting the dimer with a second terminal olefin in the presence of a catalyst having the formula ##STR1##

where M may be Os or Ru, R and R.sup.1 may be the same or different and may be hydrogen or a substitutent group selected from C.sub.1-C.sub.20 alkyl, C.sub.2-C.sub.20 alkenyl, C.sub.2-C.sub.20alkynyl, aryl, C.sub.1C.sub.20 carboxylate, C.sub.1-C.sub.20 alkoxy, C.sub.2-C.sub.20 alkenyloxy, C.sub.2-C.sub.20 alkynyloxy, aryloxy, C.sub.2-C.sub.20 alkoxycarbonyl, C.sub.1-C.sub.20 alkylthio, C.sub.1-C.sub.20 alkylsulfonyl, and C.sub.1-C.sub.20 alkylsulfinyl. X and X.sup.1 may be the same or different and may be any anionic ligand. L and L.sup.1 may be the same or different and may be any neutral electron donor.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER:

2002:38021 USPATFULL

TITLE:

INVENTOR(S):

Metathesis syntheses of pheromones or their components Pederson, Richard L., San Gabriel, CA, UNITED STATES

Grubbs, Robert H., South Pasadena, CA, UNITED

STATES

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2002022741	A1	20020221	
	US 6696597	B2	20040224	
APPLICATION INFO.:	US 2001-833018	A1	20010410	(9)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 1999-387486, filed

on 1 Sep 1999, GRANTED, Pat. No. US 6215019

NUMBER DATE

PRIORITY INFORMATION: WO 2000-US31549 20001117

US 1998-98792P 19980901 (60) US 1999-166543P 19991118 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: STOEL RIVES LLP, 900 SW FIFTH AVENUE, SUITE 2600,

PORTLAND, OR, 97204

NUMBER OF CLAIMS: 124 EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 40 Drawing Page(s)

LINE COUNT: 2316

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

The present invention relates to metathesis syntheses for insect sex-attractant pheromones or their components, such as E-5-decenyl acetate, the major component of the Peach Twig Borer pheromone; (5R, 6S)-6-acetoxy-5-hexadecanolide, the mosquito oviposition attractant pheromone; E9, Z11-hexadecadienal, the pecan nut casebearer moth pheromone; 9-tetradecenyl formate, an analog of the Diamondback Moth (DBM) pheromone; 11-tetradecenyl acetate, the Omnivorous Leafroller (OLR) pheromone; E-4-tridecenyl acetate, the major component of the Tomato Pinworm (TPW) pheromone; E, E-8, 10-dodecadienol, the Codling Moth (CM) pheromone. The syntheses preferably employ a Class I-IV metathesis catalyst, entail few reaction steps, use generally commercially available starting materials, and have relatively short process times. These syntheses produce good yields without the need for expensive or sophisticated equipment. The invention also provides an inexpensive route for producing omega-haloalkenols by cross-metathesizing alpha-omega-diacetoxy alkenes and alpha-omega-dihalides to yield omega-haloalkenols, which are easily converted into omega-haloalkanols under traditional hydrogenation methods.

### CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L3 ANSWER 5 OF 9 USPATFULL on STN

PATENT ASSIGNEE(S):

ACCESSION NUMBER: 2001:185420 USPATFULL

TITLE: Methods for cross-metathesis of terminal olefins INVENTOR(S): Grubbs, Robert H., South Pasadena, CA, United

States

O'Leary, Daniel J., Claremont, CA, United States Blackwell, Helen E., Somerville, MA, United States California Institute of Technology, Pasadena, CA,

United States (U.S. corporation)

 NUMBER DATE

PRIORITY INFORMATION: US 1999-117270P 19990126 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: GRANTED
PRIMARY EXAMINER: Wu, David W.
ASSISTANT EXAMINER: Harlan, R.

LEGAL REPRESENTATIVE: Pillsbury Winthrop, LLP, Garde, Tanuja V.

NUMBER OF CLAIMS: 19
EXEMPLARY CLAIM: 1
LINE COUNT: 392

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A method for the cross-metathesis of terminal olefins is disclosed. The method describes making disubstituted internal olefin products by contacting a first terminal olefin with another first terminal olefin to form a dimer and then contacting the dimer with a second terminal olefin in the presence of a catalyst having the formula ##STR1##

where M may be Os or Ru, R and R.sup.1 may be the same or different and may be hydrogen or a substitutent group selected from C.sub.1 -C.sub.20 alkyl, C.sub.2 -C.sub.20 alkenyl,C.sub.2 -C.sub.20 alkynyl, aryl, C.sub.1 -C.sub.20 carboxylate, C.sub.1 -C.sub.20 alkoxy, C.sub.2 -C.sub.20 alkenyloxy, C.sub.2 -C.sub.20 alkynyloxy, aryloxy, C.sub.2 -C.sub.20 alkoxycarbonyl, C.sub.1 -C.sub.20 alkylthio, C.sub.1 -C.sub.20 alkylsulfonyl, and C.sub.1 -C.sub.20 alkylsulfinyl. X and X.sup.1 may be the same or different and may be any neutral electron donor.

#### CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L3 ANSWER 6 OF 9 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2003:678852 CAPLUS

DOCUMENT NUMBER:

139:214889

TITLE:

Ring expansion of cyclic olefins by olefin metathesis

reactions with an acyclic diene and ring-opening

polymerization of the cyclic olefins

INVENTOR(S):

Choi, Tae-Lim; Lee, Choon Woo; Rutenberg, Isaac M.;

Kim, Hyunjin M.; Grubbs, Robert H.

PATENT ASSIGNEE(S):

California Institute of Technology, USA

SOURCE:

PCT Int. Appl., 94 pp.

\_\_\_\_\_

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.				KIND		DATE			APPLICATION NO.					DATE				
						·					<del>-</del>							
WO	2003	0707	79		A1 20030828			WO 2003-US5207										
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		PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	TJ,	TM,	TN,	TR,	TT,	TZ,	
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		ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,	TG	•	
ΑU	2003	2163	52		A1		2003	0909	7	AU 20	003-	2163	52		20	0030	219	
US	2003	2363	77		A1		2003	1225	1	US 2003-371195					20030219			
US	6987	154			B2		20060117											
US 2003236367					A1		2003	1225	US 2003-371196						20030219			

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US 7034096
                          B2
                                20060425
                        . A1
     EP 1483300
                                20041208
                                            EP 2003-742846
                                                                   20030219
            AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK
     JP 2005517774
                                            JP 2003-569686
                         T2
                                20050616
                                                                   20030219
PRIORITY APPLN. INFO.:
                                            US 2002-359055P
                                                                P
                                                                   20020219
                                            WO 2003-US5207
                                                                W 20030219
OTHER SOURCE(S):
                         MARPAT 139:214889
     This invention relates generally to synthetic procedures that include the
```

AB This invention relates generally to synthetic procedures that include the step of ring-opening metathesis of cyclic olefins and reaction with an acyclic diene co-reactant to produce olefin macrocycles by ring expansion, or alternatively, to produce regularly repeating A,B-alternating olefin polymers. The ring expansion of the cyclic olefin is provided by three types of sequential olefin metathesis (ring-opening, cross, and ring-closing olefin metathesis), and the A,B-alternating polymers are produced by simply varying the reaction conditions and/or reactant proportions and using only two types of olefin metathesis (ring-opening and cross) to provide regularly repeating ABAB...etc. polymers via ring-opening metathesis polymerization (ROMP). More particularly, the invention

pertains to synthesis of olefin macrocycles and A,B-alternating olefin polymers via olefin metathesis reactions using a Group 8 transition metal complex as the metathesis catalyst to provide metathesis insertion of the diene monomer into the backbone of the polyolefin. A typical polymer was manufactured by polymerization of 90 mg 1,4-butanediol diacrylate with 65  $\mu$ L

of

cyclooctene in the presence of (ImesH2)(PCy3)Cl2Ru:CHPh, and a typical macrocyclic product was manufactured by. Also, the polymers provided herein have utility in a variety of fields, including not only polymer chemical per se, but also in the pharmaceutical, biomedical, and packaging industries where the structure and properties of polymers need to be tightly controlled.

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 7 OF 9 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

PATENT ASSIGNEE(S):

2000:842145 CAPLUS

DOCUMENT NUMBER:

134:29790

TITLE:

Imidazolidine-based metal carbene metathesis catalysts

Grubbs, Robert H.; Scholl, Matthias California Institute of Technology, USA

SOURCE:

PCT Int. Appl., 40 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

INVENTOR(S):

Patent English

LANGUAGE:

Englis

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.				KINI	)	DATE .			APPLICATION NO.					DATE				
					A2 20001130		1	WO 2000-US14048						20000522				
WO	WO 2000071554				<b>A3</b>		2001	0705										
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CA	2372	746			AA		2000	1130	(	CA 2000-2372746					20000522			
ΕP	1180	108			A2		2002	0220	EP 2000-937665						20000522			
ΕP	1180	108			B1		2003	0827										

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MARPAT 134:29790

GI

Metathesis catalysts with an imidazolidine-based liqand have general AB structure I (M = Ru, Os; X, X1 = anionic ligand; L = neutral electron donor ligand; R, R1, R6-9 = H, C1-20 alkyl, C2-20 alkenyl, C2-20 alkynyl, aryl, C1-20 carboxylate, C1-20 alkoxy, C2-20 alkenyloxy, C2-20 alkynyloxy, aryloxy, C2-20 alkoxycarbonyl, C1-20 alkylthiol, arylthiol, C1-20 alkylsulfonyl, C1-20 alkylsulfinyl) and are prepared by contacting complex II with imidazolidine compound III (R13 = C1-20 alkyl, aryl). The inclusion of an imidazolidine liqund to the previously described ruthenium or osmium catalysts has been found to dramatically improve the properties of these complexes. The inventive catalysts maintains the functional group tolerance of previously described ruthenium complexes while having enhanced metathesis activity that compares favorably to prior art tungsten and molybdenum systems.

ANSWER 8 OF 9 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

2000:227579 CAPLUS

DOCUMENT NUMBER:

132:252195

TITLE:

Regio-regular functionalized polymeric packaging

material

INVENTOR(S):

Bansleben, Donald A.; Huynh-Tran, Truc-Chi; Blanski,

Rusty L.; Hughes, Paul A.; Roberts, William P.;

Grubbs, Robert H.; Hatfield, Galen R.

PATENT ASSIGNEE(S):

Cryovac, Inc., USA

SOURCE:

PCT Int. Appl., 50 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.				<b>D</b> :	DATE			APPLICATION NO.					DATE		
WO 2000018	A1	A1 20000406			1	WO 1999-US21826						19990920			
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JP	, KE,	KG,	ΚP,	KR,	ΚZ,	LC,	LK,	LR,	LS,	LT,	LU,	LV,	MD,	MG,	MK,
MN	, MW,	MX,	NO,	NZ,	PL,	PT,	RO,	RU,	SD,	SE,	SG,	SI,	SK,	SL,	TJ,

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                                            EP 1999-948364
     EP 1124686
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     JP 3327910
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                                20030429
                                            NZ 1999-510172
                          Α
                                                                    19990920
PRIORITY APPLN. INFO.:
                                            US 1998-161663
                                                                 A 19980929
                                            WO 1999-US21826
                                                                 W 19990920
     The title packaging material comprises at least one layer wherein at least
     one of the layer comprises a linear, regionegular functionalized
     hydrocarbon polymer having repeating units represented by the formula:
     CH2(CR2)aCHXCHY wherein X and Y each independently represents hydrogen, a
     C1-3 alkyl or a functional group selected from hydroxyl, 'carboxylic acid,
     carboxylic acid ester, acetate, amide, nitrile or carbonyl group, provided
     at least one of the X and Y represents a functional group; each R
     independently represents hydrogen or a C1-5 alkyl; and "a" represents an
     integer of 1 to 9. The polymers are prepared, e.g., by ring-
     opening metathesis polymerization of 1-hydroxycyclooct-4-ene
     and hydrogenation of the resulting polymer.
REFERENCE COUNT:
                         7
                               THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS
                               RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT
     ANSWER 9 OF 9 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER:
                         1999:640914 CAPLUS
DOCUMENT NUMBER:
                         131:258114
TITLE:
                         Linear functional regio-regular copolymers and their
                         manufacture
INVENTOR (S):
                         Bansleben, Donald A.; Huynh-Tran, True-chi Thi;
                         Blanski, Rusty L.; Hughes, Paul A.; Roberts, William
                         P.; Grubbs, Robert H.; Hatfield, Galen R.
PATENT ASSIGNEE(S):
                         Cryovac, Inc., USA
SOURCE:
                         PCT Int. Appl., 41 pp.
                         CODEN: PIXXD2
DOCUMENT TYPE:
                         Patent
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PATENT NO.				KIND		DATE		APPLICATION NO.						DATE						
WO 0050331					7.1	71 10001			007 WO 1999-US6578							10000325				
WO	WO 9950331				АĻ		IJJJ.	100/	1	NO I	フフフー		13330345							
	W:	AL,	AM,	ΑT,	ΑU,	ΑZ,	BA,	BB,	BG,	BR,	BY,	CA,	CH,	CN,	CU,	CZ,	DE,			
		DK,	EE,	ES,	FΙ,	GB,	GE,	GH,	GM,	HU,	ID,	IL,	IS,	JP,	KΕ,	KG,	KΡ,			
		KR,	ΚZ,	LC,	LK,	LR,	LS,	LT,	LU,	LV,	MD,	MG,	MK,	MN,	MW,	MX,	NO,			
		NZ,	PL,	PT,	RO,	RU,	SD,	SE,	SG,	SI,	SK,	SL,	ТJ,	TM,	TR,	TT,	UA,			
		ŪĠ,	US,	UΖ,	VN,	YU,	ZW,	AM,	ΑZ,	BY,	KG,	ΚZ,	MD,	RU,	ТJ,	TM				
	RW:	GH,	GM,	KΕ,	LS,	MW,	SD,	SL,	SZ,	UG,	ZW,	ΑT,	BE,	CH,	CY,	DE,	DK,			
		ES,	FI,	FR,	GB,	GR,	ΙE,	IT,	LU,	MC,	NL,	PT,	SE,	BF,	ВJ,	CF,	CG,			
		CI,	CM,	GA,	GN,	GW,	ML,	MR,	NE,	SN,	TD,	TG								
US	6153	714			Α		2000	1128	1	JS 1:	998-	5207	9		19	9980	331			
CA	2326	797			AA		1999	1007	(	CA 1:	999-2	2326	797		19	9990	325			
ΑU	9931	157			A1		1999	1018	AU 1999-31157					19990325						
ΑU	7499	72			B2		2002	0704												
BR	9909	231			Α		2000	1128	128 BR 1999-9231					19990325						

English

LANGUAGE:

FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

JP	3264	442			B2	2002	0311	JP	2000-	54122	28			19990	325	
JP	2002509961					2002	0402									
EP	1235	871			<b>A1</b>	2002	0904	EP	1999-	91289	19990325			325		
	R:	ΑT,	BE,	CH,	DE,	DK, ES,	FR,	GB, GI	R, IT,	LI,	LU,	NL,	SE	, MC,	PT,	
		IE,	FI,	CY												
NZ	5068	24			Α	2003	0228	NZ	1999-	50682	24			19990	325	
TW	4604	86			В	2001	1021	TW	1999-	88104	1918			19990	717	
US	6506	860			B1	2003	0114	US	2000-	67116	53		:	20000	928	
PRIORITY	APP	LN.	INFO	. :				US	1998-	52079	7	7	<b>A</b> :	19980	331	
								WΩ	1999-1	119657	7.8	TA	J ·	1 9991	325	

The title polymer has a linear hydrocarbon polymer backbone with vicinal functional groups having O and/or N-containing groups, such as hydroxy, carboxylic acid or ester, carbonyl acetate, amide, nitrile and the like, pendent from the polymer backbone chain in a regio-regular manner and is prepared by ring-opening metathesis polymerization of cyclic precursor, optionally followed by hydrogenation of the chain. Hydrogenated poly(5-cyclooctene-trans-1,2-diol) had number-average mol. weight 23,900, polydispersity 2, tensile modulus 180.3 ksi, and toughness 9226 in.-lb/in.3; vs. no value, no value, 337.2, and 888, resp., for conventional EVAL polymer.

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

## => d 13 9 hit

- L3 ANSWER 9 OF 9 CAPLUS COPYRIGHT 2006 ACS on STN
- IN Bansleben, Donald A.; Huynh-Tran, True-chi Thi; Blanski, Rusty L.; Hughes,
   Paul A.; Roberts, William P.; Grubbs, Robert H.; Hatfield, Galen
- The title polymer has a linear hydrocarbon polymer backbone with vicinal functional groups having O and/or N-containing groups, such as hydroxy, carboxylic acid or ester, carbonyl acetate, amide, nitrile and the like, pendent from the polymer backbone chain in a regio-regular manner and is prepared by ring-opening metathesis polymerization of cyclic precursor, optionally followed by hydrogenation of the chain. Hydrogenated poly(5-cyclooctene-trans-1,2-diol) had number-average mol. weight 23,900, polydispersity 2, tensile modulus 180.3 ksi, and toughness 9226 in.-lb/in.3; vs. no value, no value, 337.2, and 888, resp., for conventional EVAL polymer.

#### => d 13 7 hit

- L3 ANSWER 7 OF 9 CAPLUS COPYRIGHT 2006 ACS on STN
- IN Grubbs, Robert H.; Scholl, Matthias
- 21622-00-4P, Cyclopent-3-ene-1,1-dicarboxylic acid diethyl ester TT 25038-78-2P, Dicyclopentadiene homopolymer 25103-85-9P, Cyclopentene homopolymer 26353-15-1P, cis,cis-Cycloocta-1,5-diene homopolymer 28603-38-5P, cis-Cyclooctene homopolymer 68865-44-1P 69596-51-6P 165549-24-6P 165549-26-8P 215167-65-0P 304022-56-8DP, 1,5-Dimethyl-1,5-cyclooctadiene homopolymer, hydrogenated 304022-56-8P, 1,5-Dimethyl-1,5-cyclooctadiene homopolymer 310397-73-0P 310397-74-1P 310397-75-2P 310397-76-3P RL: IMF (Industrial manufacture); PREP (Preparation) (metathesis reaction using imidazolidine-based metal carbene catalysts)

# => d 13 8 hit

- L3 ANSWER 8 OF 9 CAPLUS COPYRIGHT 2006 ACS on STN
- IN Bansleben, Donald A.; Huynh-Tran, Truc-Chi; Blanski, Rusty L.; Hughes,
  Paul A.; Roberts, William P.; Grubbs, Robert H.; Hatfield, Galen

R.

The title packaging material comprises at least one layer wherein at least one of the layer comprises a linear, regioregular functionalized hydrocarbon polymer having repeating units represented by the formula: CH2(CR2)aCHXCHY wherein X and Y each independently represents hydrogen, a C1-3 alkyl or a functional group selected from hydroxyl, carboxylic acid, carboxylic acid ester, acetate, amide, nitrile or carbonyl group, provided at least one of the X and Y represents a functional group; each R independently represents hydrogen or a C1-5 alkyl; and "a" represents an integer of 1 to 9. The polymers are prepared, e.g., by ring-opening metathesis polymerization of 1-hydroxycyclooct-4-ene and hydrogenation of the resulting polymer.